IN THE CLAIMS

This listing of claims replaces all prior versions, and listings, in this application.

Claims 1-39 (canceled)

40. (currently amended) A method of diagnosis or monitoring of infection with an intracellular pathogen in an individual wherein peptide-specific effector T cells are enumerated, which method comprises:

(a) providing a fluid sample from said individual containing fresh T cells, which have not been cultured *in vitro*, in contact with a surface carrying an immobilized antibody to interferon-γ,

(b) presenting to the T cells a T cell-activating peptide derived from the pathogen in the absence of any antigen presenting cells pre-cultured with said peptide,

(c) incubating the fluid sample under condition to permit ~~to cause~~ release of said interferon-γ, and

(d) detecting released interferon-γ bound to said immobilized antibody to enumerate said peptide-specific effector T cells,

wherein the incubation is ~~continued~~ for a time to permit interferon-γ release by only those T cells that have been pre-sensitized *in vivo* to the T cell-activating peptide and are capable of immediate effector function without the need to effect division/differentiation by *in vitro* culture in the presence of the T cell-activating peptide; whereby said infection is diagnosed or monitored.

41. (previously presented) The method as claimed in claim 40, wherein the intracellular pathogen is selected from the group consisting of hepatitis B virus, hepatitis C virus, *M. tuberculosis*, *P. falciparum*, human immunodeficiency virus (HIV), and influenza virus.

42. (previously presented) The method as claimed in claim 40, wherein an ESAT-6 peptide of *M. tuberculosis* is presented to the T cells.

43. (previously presented) The method as claimed in claim 40, wherein the T cells are peripheral blood mononuclear cells.

44. (previously presented) The method as claimed in claim 40, wherein a peptide of 7-12 amino acid residues in length is added to the T-cell containing fluid, which is recognized by CD8+ T cells.

45. (previously presented) The method as claimed in claim 40, wherein the resulting fluid mixture is incubated under non-sterile conditions.

46. (previously presented) The method as claimed in claim 40, wherein the peptide is a pre-identified epitope.

47. (previously presented) The method as claimed in claim 40, wherein incubation is continued for a time of 4 to 24 hours.

48. (previously presented) The method as claimed in claim 40, wherein the T cells are taken from a patient known to be suffering, or to have suffered from, infection with an intracellular pathogen.

49. (currently amended) The method as claimed in claim [[40]] 41, wherein the intracellular pathogen is HIV ~~performed to monitor progress of HIV infection~~.

50. (currently amended) The method as claimed in claim 40, wherein the individual has been immunized with ~~performed to monitor the effect of~~ a vaccine.

51. (currently amended) A method of diagnosis or monitoring of infection with *M. tuberculosis* in an individual wherein peptide-specific effector T cells are enumerated, which method comprises:

(a) providing a fluid sample comprising peripheral blood mononuclear cells from said individual containing fresh T cells, which have not been cultured *in vitro*, in contact with a surface carrying an immobilized antibody to interferon-γ,

(b) presenting an ESAT-6 peptide of *M. tuberculosis* to T cells in the fluid sample in the absence of any antigen presenting cells pre-cultured with said peptide,

(c) incubating the resulting fluid sample under condition to permit ~~to cause~~ release of said interferon-γ, and

(d) detecting released interferon-γ bound to said immobilized antibody to enumerate said peptide-specific effector T cells,

wherein the incubation is ~~continued~~ for a time to permit interferon-γ release by only those T cells that have been pre-sensitized *in vivo* to the ESAT-6 peptide and are capable of immediate effector function without the need to effect division/differentiation by *in vitro* culture in the presence of the ESAT-6 peptide; whereby said infection is diagnosed or monitored.

52. (previously presented) The method as claimed in claim 51, wherein a peptide of 7-12 amino acid residues in length is added to the T-cell containing fluid sample, which is recognized by CD8+ T cells.

53. (previously presented) The method as claimed in claim 51, wherein the peptide-containing fluid sample is incubated under non-sterile conditions.

54. (currently amended) The method as claimed in claim 51, wherein the peripheral blood mononuclear cells are taken from a patient known to be suffering, or to have suffered from, infection with *M. tuberculosis* ~~an intracellular pathogen~~.

55. (currently amended) A method of diagnosis or monitoring of infection with *M. tuberculosis* in an individual wherein peptide-specific effector T cells are enumerated, which method comprises:

(a) providing a fluid sample comprising peripheral blood mononuclear cells from said individual containing fresh T cells, which have not been cultured *in vitro*, in contact with a surface carrying an immobilized antibody to interferon-γ,

(b) presenting an ESAT-6 peptide of *M. tuberculosis* to T cells in the fluid sample in the absence of any antigen presenting cells pre-cultured with said peptide,

(c) incubating the peptide-containing fluid sample under condition to permit ~~to cause~~ release of said interferon-γ, and

(d) detecting released interferon-γ bound to said immobilized antibody to enumerate said peptide-specific effector T cells,

wherein the incubation is ~~continued~~ for a time from 4 to 24 hours to permit interferon-γ release by only those T cells that have been pre-sensitized *in vivo* to the ESAT-6 peptide and are capable of immediate effector function without the need to effect division/differentiation by *in vitro* culture in the presence of the ESAT-6 peptide; whereby said infection is diagnosed or monitored.

56. (previously presented) The method as claimed in claim 55, wherein a peptide of 7-12 amino acid residues in length is added to the T-cell containing fluid sample, which is recognized by CD8+ T cells.

57. (previously presented) The method as claimed in claim 55, wherein the peptide-containing fluid sample is incubated under non-sterile conditions.

58. (currently amended) The method as claimed in claim 55, wherein the peripheral blood mononuclear cells are taken from a patient known to be suffering, or to have suffered from, infection with *M. tuberculosis* ~~an intracellular pathogen~~.

59. (new) The method as claimed in claim 40, wherein the incubation is for a time from 4 to 24 hours.

60. (new) The method as claimed in claim 40, wherein the incubation is for a time from 6 to 16 hours.

61. (new) The method as claimed in claim 55, wherein the incubation is for a time from 6 to 16 hours.